MANAGING RENEWABLE ENERGY IN THE EU10 REGION

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The problems of renewable energy and regional development have gained a global dimension, as well as the concerns about the economic growth. Therefore, this study investigates the issue of managing renewable energy in the EU10 region, within the context of recovery and anticipated growth of the region. The findings of this study disclose that an important source of economic growth in the EU10 region's countries may be to start some new investments in renewable energy. In order to develop the field of renewable energy may be used EU funds, and may be envisaged different public-private partnership models, that may contribute to lower societal costs and increased deployment rates. The study was conducted by combining a wide variety of sources, such as statistics, reports and articles. The results reported in this study could be used for further research in the area of implementing green energy projects in the EU10 region. Another direction for further research could be to identify the most attractive countries for different renewable energy investment projects in the EU10 region.

Keywords: renewable energy, EU10 region, regional development, investment, economic growth

JEL Classification: Q42, R11, O30, M10.

1. Introduction

Nowadays all European regions are interdependent in terms of guaranteeing energy supplies, creating stable economic conditions and effectively combating climate change. All actors are playing an essential role in managing this change, at local, regional, national and European level. The aim of this paper is to reveal the issue of managing renewable energy in the EU10 region, within the context of recovery and anticipated growth of the region.

The research was conducted using a wide variety of sources, such as statistics, reports and articles. The research question was answered by analyzing published sources, evaluating and interpreting evidence.

2. Recovery and anticipated growth in the EU10 region

The EU10 region includes the eight Central European countries that joined the EU in 2004 (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia), as well as the two countries that joined the EU in 2007 (Bulgaria and Romania).

The global financial crisis has harmed the supply potential of the EU10 economies. The credit constrains and higher risk aversion have lead to lower capital flows, restrained investment, possibly higher structural unemployment and lower total factor productivity growth (The World Bank, 2011a: 22).

In early 2011, about two and a half years after the global financial crisis broke, economic output in the EU10 region had returned to the pre-crisis level. The annual growth rates in the EU10 region in 2008-2010 timeframe is illustrated in figure 1. The pace of the recovery differs across the EU10 region, reflecting, among other factors, the overheating prior to the crisis, trade openness and competitiveness.

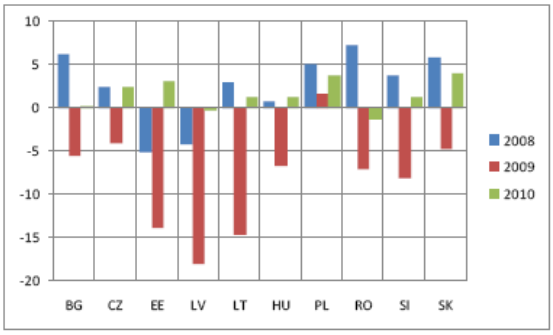

Figure 1 Annual growth rates in the EU10 region, year-on-year, in percent
(*Source*: The World Bank, 2011a: 6)

The recovery was mainly driven by external demand, while domestic demand was restrained by weak labour market conditions, higher commodity prices, and fiscal policy. The biggest growth improvements in 2010 were experienced by the countries with the most significant overheating prior to the crisis and largest contractions in 2009, such as Latvia, Estonia and Lithuania. As a result, growth differences across the EU10 region narrowed from almost 20 percentage points in 2009 to just over 5 percentage points in 2010. Nevertheless, country differences remained important. Three countries expanded by 3.1 percent or more: Estonia and the countries with limited pre-crisis imbalances, namely Slovakia and Poland. Strong restocking was supported by solid net exports in the case of Slovakia and Estonia, and by consumption in the case of Poland. The growth varied between 1.2 percent and 2.4 percent in the Czech Republic, Hungary and Slovenia where was supported by restocking and in Lithuania where was supported by very strong restocking. Growth remained close to zero in Bulgaria and negative in Romania and Latvia in light of weak consumption and even weaker investment (The World Bank, 2011a: 5). Further structural reforms can help to boost potential growth and facilitate the large fiscal consolidation (The World Bank, 2009).
The contribution to gross value added (GVA) growth in the EU10 countries (figure 2) shows that the accelerating growth in the EU10 region during 2010 came with a broadening of growth across sectors.

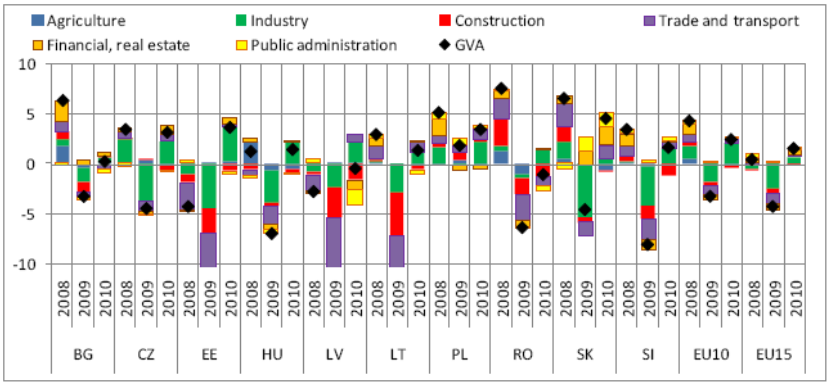

Figure 2 Contribution to GVA growth in the EU10 region
(*Source*: The World Bank, 2011a: 5)

The double-digits growth of industry reflects the rebound in global demand for capital goods and durables and the deep integration with European production chains (The World Bank, 2011a: 4). However, in some EU10 countries the growth spread to finance and real estate and strengthened

trade, hotels and restaurants, and transport, while public administration and community services remained subdued due to fiscal pressures across the region.
For the timeframe 2010-2012 firms are expected to raise investment with higher capacity utilization and strong global demand for capital goods and durables, and households to step up consumption with improving confidence about future prospects (The World Bank, 2011a: 2). Therefore, the projected gross domestic product (GDP) growth rates (figure 3) may be about 2-4 percents for some of the EU10 region's countries, and more than 4 percent for other of the EU10 region's countries in 2012.

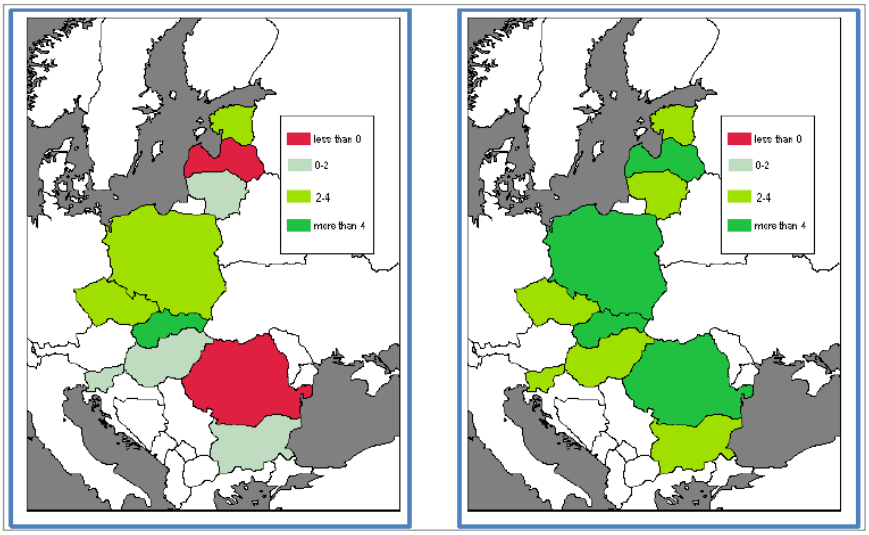

Figure 3 Projected 2010 and 2012 GDP growth rates in the EU10 region, percent
(*Source*: The World Bank, 2011b: 8)

The analysis of the anticipated growth in the EU10 region (figure 4) reveals that Slovenia, the Czech Republic and Hungary may have a growth somewhat less than elsewhere in the region. The growth in these countries could increase to about 2.5 percent to 3 percent by 2012. One reason for this increase may be that these countries have already converged more to EU income levels (The World Bank, 2011a: 21).

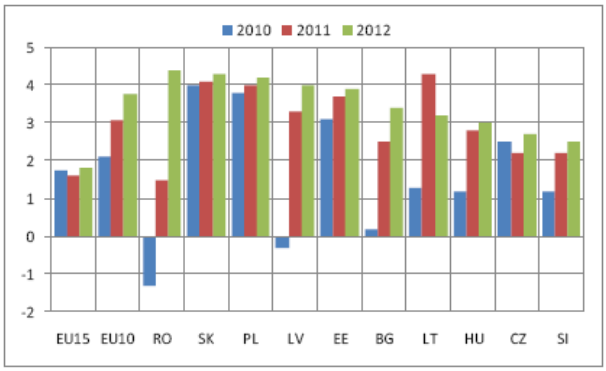

Figure 4 Anticipated growth in the EU10 region
(*Source*: The World Bank, 2011a: 22)
On the other hand, according to The World Bank (2011a: 21) the pace of the recovery in Slovakia and Poland is set to remain solid due to limited pre-crisis imbalances, strong integration in European production networks, EU funds, and, in the case of Poland, stable consumption. In

Estonia, Lithuania and Latvia growth could improve to about 4 percent by 2012 as domestic demand continues to recover. Aside from Latvia and Lithuania, Romania and Bulgaria, where the crisis hit later than elsewhere, are set to see the biggest improvements in growth in 2011.
In particular, the recovery of the Romanian economy may last more than expected. The Government of Romania is confronted with the difficult challenge of reconciling three objectives: to protect priority programs for economic and social development in order to enhance growth prospects and to mitigate the social costs of the economic crisis; to exit from anti-crisis policies and ensure fiscal consolidation once the recovery is under way in order to make room for a private sector led recovery; and to improve policies, regulations and coordination in order to prevent such crises in future (The World Bank, 2009).
An important source of economic growth in the EU10 region's countries may be to start some new investments in renewable energy.

3. Managing renewable energy's development in the EU10 region

The ambitious European 2020 targets on energy and climate, and more particular for renewable energy, request an important mobilization of investments in the coming decade (ECOFYS, 2011: 143). Before the financial crisis of 2008, several electricity-importing countries in the EU10 region had begun to experience difficulties with supply, but the crisis has reduced demand and created some breathing room. In addition, the crisis created the opportunity to take action to mitigate the impact of the anticipated energy crunch. Mitigating actions are required on both the supply side and the demand side and will require significant investments if the region wants to meet all its anticipated energy needs. This level of investment cannot be provided by the public sector alone and measures will be required to create a climate that appeals to private sector investors (The World Bank, 2010: 1).
There are some investment funds at the European Union's level, of which some may be used in order to develop the field of renewable energy. Through the European Regional Development Fund (ERDF) and the European Social Fund (ESF), otherwise known as the Structural Funds, as well as the Cohesion Fund, investments can be made in thousands of projects across all Europe's regions, with the aim to promote economic and social cohesion by reducing the disparities between Member States and regions. With a budget of €347 billion for 2007-2013, Cohesion Policy represents the single largest source of financial support at the European Union's level for investment in growth and jobs, designed to enable all regions to compete effectively in the internal market (European Commission, 2009: 1). The financial allocations through the Cohesion Policy for energy efficiency and renewable energy in the EU10 region are illustrated in figure 5.

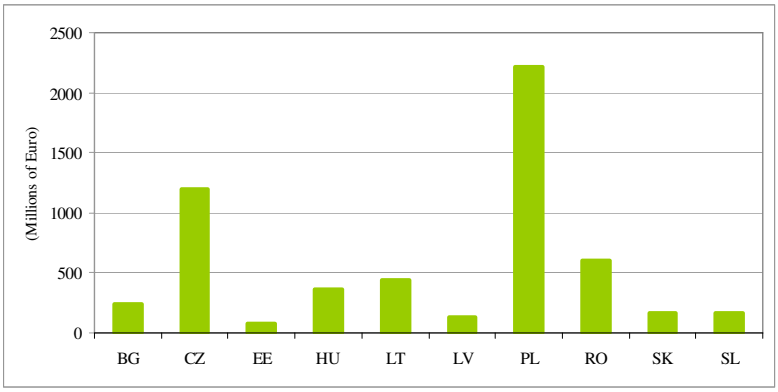

Figure 5 EU funds for energy efficiency and renewable energy in the EU10 region
(*Source*: Adapted from European Commission, 2007)

As the challenges faced by Europe's regions have changed over time, so has changed the policy. Against a background of momentous change in the Union as a result of enlargement and of increasing globalisation, concerns about energy supplies, demographic decline, climate change and more recently, world recession, the policy has evolved, as a key part of the response to meet these new realities (European Commission, 2009: 1).
Governments have a major role to play in energy efficiency, by allowing energy tariffs to reflect costs, and also by being proactive in setting and updating energy efficiency standards for homes, equipment, and vehicles, and in enforcing them. Some measures that may be taken by governments may be carrying out energy efficiency programs in the public sector, informing the public on energy efficient technology options, and designing cities with alternative means of transport (The World Bank, 2010: 3).
The investment in energy efficiency can often give a major boost to local industries (for instance, the restoration of buildings). While regional energy strategies are implemented in the context of European integration, the role of regions as economic players is also becoming increasingly important and therefore, regions must work to create an overall framework which is conducive to action (Frant and Minica, 2008: 2). The deployment of most renewable energy technologies still needs both financial and non-financial policy support, due to the stage of development of either technology or market, and due to fact that renewable energy sources still do not have the same playing field as conventional energy technologies (ECOFYS, 2011: 143).
A key priority of the policy makers is to secure the funding to meet the region's future energy needs. However, the countries of the EU10 region also need to ensure that in developing their energy strategies and in implementing their investment programs they act in an environmentally responsible fashion (The World Bank, 2010: 4).
In case of the large-scale projects (that require investments of 50 M€ or more), with significant technological, regulatory, or market risks, government involvement/participation may help to establish financial close at lower cost of capital. In order to address this issue, different public-private partnership (PPP) models can be envisaged, and may contribute to lower (societal) costs and increased deployment rates (ECOFYS, 2011: 148).

4. Conclusions

This study has revealed that in early 2011, about two and a half years after the global financial crisis broke, economic output in the EU10 region had returned to the pre-crisis level. However, the pace of the recovery differs across the EU10 region, reflecting, among other factors, the overheating prior to the crisis, trade openness and competitiveness. The projected gross domestic product growth rates may be about 2-4 percents for some of the EU10 region's countries, and more than 4 percent for other of the EU10 region's countries in 2012. Firms are expected to raise investment with higher capacity utilization and strong global demand for capital goods and durables, and households to step up consumption with improving confidence about future prospects.
Another conclusion of this study is that an important source of economic growth in the EU10 region's countries may be to start some new investments in renewable energy. The ambitious European 2020 targets for renewable energy request an important mobilization of investments in the coming decade, which cannot be provided by the public sector alone and therefore measures will be required to create a climate that appeals to private sector investors. In addition, EU funds may be used in order to develop the field of renewable energy, and different public-private partnership models may be envisaged, and may contribute to lower (societal) costs and increased deployment rates.
The results reported in this study could be used for further research in the area of implementing green energy projects in the EU10 region. Another direction for further research could be to

identify the most attractive countries for different renewable energy investment projects in the EU10 region.

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